

PHASE II: DEMONSTRATION AND VALIDATION

Step 13.0 Prepare HF/S Inputs to KDP 3

Objective:

- The Coast Guard System Acquisition process describes the effort in Phase 2, Demonstration & Validation, to further develops the most promising concept(s) identified in Phase 1 and demonstrates and validates the concept(s) by developmental testing and/or simulation.
- KDP 3, at the end of Phase 2, requires approval to begin full scale development. The decisions to be made at KDP 3 are as follows:
 - Is the mission need still justified?
 - Do tests and demonstrations to date provide that the technologies and processes critical to success are attainable and risks have been identified?
 - Is the proposed concept/alternative affordable in the context of the LRRAP process?
 - Are adequate resources available for the major acquisition or can they be acquired?
 - Have all exit criteria established at KDP 2 been satisfied?
 - Has the requisite documentation for Phase 2 been approved?

Inputs:

- Results of HF/S efforts during Phase 1.

Outputs:

- Outputs to KDP 2 documentation

13.1 Prepare HF/S inputs to the Acquisition Phase Summary - The purpose of the Acquisition Phase Summary is to provide an executive summary of the results of the previous acquisition phase activities.

13.1.1 Provide HF/S inputs to the Required Accomplishments, including the following:

- Review HF/S inputs to the Phase 1 Proposal ;
- Assess major strengths and weaknesses of each concept alternative in terms of HF/S issues and concerns;
- Evaluate Non-development items/Commercial-off-the-shelf items (NDI/COTS) as a viable technology for in-incorporation in the system design, and assess HF/S aspects of NDI/COTS;
- Develop Acquisition Plan (AP)
- Review HF/S inputs to the Life Cycle Cost Estimate (LCCE) (for the technically feasible concepts/alternatives).
- Review HF/S inputs to the Operational Requirements Document (ORD)

- Review HF/S inputs to the Cost Benefit Analysis (CBA)
- Review HF/S inputs to the Risk Management Plan (RMP)
- Review HF/S inputs to the Test and Evaluation Master Plan (TEMP)
- Review HF/S inputs to the Integrated Logistics Support Plan (ILSP)

13.1.2 Review HF/S criteria established at KDP 1 and determine if they were satisfied.

13.2 Develop HF/S inputs to the Acquisition Project Baseline - The APB provides quantified ranges for critical performance, cost and schedule parameters throughout the phases of the acquisition program and provides a quantified range for costs associated with an upcoming phase beginning with Phase 2. The purposes of the APB are to: enhance program stability, control costs, and provide a reference point for measuring and reporting the status of program implementation.

13.2.1 Review HF/S inputs to performance parameters

- A performance parameter's threshold is the minimum value necessary to provide an operational capability that will satisfy the mission need.
- A performance objective is a value beyond the threshold that should reflect an operationally meaningful, measurable, cost-effective, affordable, impact on operations or support beyond that provided by the threshold value.
- The objective for performance could be either higher or lower than the threshold value, depending on what will be measured. In some cases the threshold and objective could be the same.

13.2.2 Review HF/S inputs to cost criteria

13.2.3 Review HF/S inputs to schedule criteria - All parameters listed under schedule shall contain a range. The range for each schedule parameter consists of a period of time (stipulated by dates) for which a key event (such as a KDP review, design review, or completion of a test activity) is likely to occur.

13.3 Develop HF/S inputs to exit criteria - Exit Criteria means program specific accomplishments or performance parameters that must be satisfactorily demonstrated before a major acquisition can progress further in the current acquisition phase or transition to the next acquisition phase. Proposed exit criteria shall always include technical, schedule and cost elements and typically include such factors as:

13.3.1 Test reports that contain critical test results that demonstrate operational and technical thresholds and performance parameters;

13.3.2 Risk reduction goals;

13.3.3 Completion of studies;

13.3.4 Development/approval of documents;

13.3.5 Completion of key events/activities.

